

THE ADVANCED METHODS OF INVESTIGATING OF THE FRACTURES IN FORENSIC-MEDICAL PRACTICE

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INTRODUCTION: A skeletal injury diagnosed in over a third of victims is placed second after neuroinjuries within the pattern of a severe mechanical injury. Forensic–medical experts should give answers to important questions of the inquest bodies based on a detailed familiarizing themselves with the circumstances of the case, postmortem findings, a study of the roentgenological picture or an investigation of the plane of a fracture.

OBJECTIVE: designing such a mode of fixation and research of objects of forensic-medical examinations which would permit obtaining a complete information about an object under study as a whole and while studying its individual details.

METHODS: A modern method of fixation and research of forensic-medical objects is implemented via photographing by means of a digital camera, which is fixed on a tripod in the most advantageous spot of space in relation to the object of research that is situated on a rotary platform with a possibility of rotating round its axis at 360°. A composite picture of an object is achieved in the form of a series of 36 photographs in every 10° with a subsequent transfer into a 2D and 3D format by means of computer programs.

RESULTS: Fixing the research findings of expertise objects is of great significance in forensic-medical practice. A study of the fracture plane of the long bones of the lower extremity has been carried out and two-dimensional (three-dimensional) images have been obtained, enabling to examine the entire region of a fracture around the circumference tubular bone. Thus, the authors have established true distinctions among different zones of the fracture plane of the tibia, which have made it possible to draw a conclusion as to the type of deformity, the spread of a split, the point of force application and the main direction of its destruction.

CONCLUSION: A modern method allows for a possibility of a more clear-cut fixation, a study and an expert assessment of the morphological characteristics of a fracture area that considerable facilitates singling out objective diagnostic signs, which help to reveal the mechanisms of a fracture formation of the bones under study and furnish expert reports to the investigating bodies.

Key words: forensic medicine, method, investigation.

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